

VOICES AND VIEWS

OF TODAY'S TECH-SAVVY STUDENTS

NATIONAL REPORT ON NETDAY SPEAK UP DAY FOR STUDENTS 2003

This report is dedicated to all of the students who shared their amazing voices and views on technology and education as part of NetDay Speak Up Day for Students 2003.

Your voices were heard loud and clear!

We also applaud all of the educators who provided the opportunity for their students to participate in this landmark event, Speak Up Day 2003.

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About NetDay Speak Up Day for Students 2003

NetDay is dedicated to helping communities support their schools through the engagement of parents, teachers, business leaders and community volunteers. We build national and local awareness on the importance of technology within a high quality education through the dissemination of online resources, best practices and real stories about school-community successes. Our mission is to connect every child to a brighter future by supporting efforts to improve the effective use of technology.

Over the last few years, NetDay has worked directly with highly challenged communities to develop new models for effective technology integration within education. In our work with students, from kindergarten through high school, we observed first-hand the power and impact of technology on students' lives, both in school and in their personal time. With great interest, we read research reports about how students used technology to help with homework and how students viewed their technology assignments. To learn more, we conducted a series of seven focus groups with high school students from these same urban and rural communities to hear their views on technology within education. While the data we gathered from those focus groups proved to be interesting, the students' response to our request for their opinions was more significant. Each session opened up a floodgate of ideas and opinions about technology in their daily lives and how it could be used more effectively in schools.

Lesson #1: We learned that students had a lot to say, but no one had ever asked their opinions before.

The catalyst for NetDay Speak Up Day for Students 2003 was the students themselves. We wanted students across the country to be able to share their voice and their views on education technology and to have those ideas become part of the national dialogue about technology.

Our goals for Speak Up Day:

- 1. To collect authentic, unfiltered input from K-12 students about their use of technology and their ideas on how technology should be used within their education,**
- 2. To use the event to start local conversations between students and teachers, students and parents, and students and the community about decisions that impact their education, like technology, and**
- 3. To drive a new national awareness about the importance of student voice in our national dialogues on education and technology.**

In August 2003, NetDay was invited to contribute ideas for the National Education Technology Plan being developed by the US Department of Education. This provided us with the perfect opportunity to launch a national campaign to collect student voices on technology with a way to make those voices heard. The department's guidance and financial support provided the start of NetDay's Speak Up Day momentum.

Based on NetDay's legacy of mobilizing volunteers to wire schools using the Internet, we turned to online tools to launch this national awareness and action campaign. NetDay selected October 29, the anniversary of the first Internet transmission between UCLA and SRI in 1967, as our rallying date and shifted into high gear.

Lesson #2: Speak Up Day proved that nonprofits can leverage the power of viral marketing in conjunction with effective partnerships to accomplish big goals.

To achieve our goal of jumpstarting local conversations about student input, we decided to have schools register to participate in Speak Up Day and to facilitate the process for their students to take the surveys. More than 38 non-profit partners joined our effort to insure that every student had the opportunity to participate by reaching out to every school in every community in every state in the United States plus all of the Department of Defense schools around the world. Our partners used emails, listservs, newsletters, and pop-up ads to promote Speak Up Day to clients, members and colleagues.

Sun Microsystems and BellSouth provided public relations support to bring national attention to the story and Google donated adwords to drive traffic to NetDay.org. The BellSouth Foundation generously donated resources for programming, designing, and hosting the surveys and linked Speak Up Day to BellSouth's Speak Out initiative to provide students with additional opportunities to share ideas.

Every school that registered for Speak Up Day received a confirmation email with text to forward to another school. NetDay realized that teachers and school leaders who committed their own time and school to the program would be our best advocates. We encouraged them to send the message to ten more teachers or post a link from their website. Most registrants indicated that they learned about the event through an email or another teacher.

Prior to opening up the surveys for student input, over 1000 schools had registered. The schools estimated that approximately 150,000 students would take the surveys, representing kindergarten through 12th grade and urban, rural and suburban communities.

Lesson #3: To support the survey process, teachers needed clear, standards-based lesson plans.

To further support the local efforts for Speak Up Day, we provided teachers with supplemental lesson plans and resources to compliment the survey process. Many teachers took advantage of those tools and used them to initiate their own discussions about effective uses of technology in their own classroom. Schools were also provided with different survey tools to meet their specific needs. For grades 3-12, students could either complete an individualized survey or be part of a class discussion and submit aggregated group or class data. Students in grades K-3 only had the option to complete the group survey. NetDay provided detailed recommendations on how teachers could facilitate either type of survey. Based upon the data received, in many cases, schools used a mix of group discussions and individual survey submissions. Schools also notified us about many unique ways in which they were incorporating their instructional standards into this exercise and using the event as a discussion point around not only technology, but also youth civic engagement.

Lesson #4: Schools and educators want to actively support efforts to have their students' ideas shared locally and nationally.

NetDay engaged a team of web design, programming, and content experts to make Speak Up Day a reality. Pointline Interactive, IBT Software, and Nimble Press designed the registration process and the NetDay.org web pages. Nimble Press worked with Net Tango's programmers

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and designers (funded by BellSouth Foundation) to transform NetDay's survey questions into an easy and engaging online process for students of all ages and their teachers.

The result was that more than 210,000 students participated in Speak Up Day over a 12-day timeframe. Less than 0.1% of participants sent email requests for assistance during the online event. The responses we received from the schools indicated that they were very positive about their participation. The students' surveys came from all 50 states, the District of Columbia, Puerto Rico and many US Department of Defense schools worldwide, including both public and private schools. In addition to NetDay's national report, schools, districts, and students everywhere have viewed their data and performed their own analysis and communications. What we learned from the students will have an influential impact on education and technology policy and program planning.

Lesson #5: Students all across the country have a lot to say about their own technology use and how they would like to see technology used more effectively at their schools. And they want to be actively involved in decision-making about issues that impact their education.

The students and teachers who participated in Speak Up Day 2003 have been heard. The data will be used as input for the National Education Technology Plan, and many states have requested aggregated state data from NetDay for their education technology policy and program development. In addition, each school or school district that participated in Speak Up Day can view their own data results at www.NetDay.org. School districts are using that data for both internal planning and external communications efforts. One district in Texas plans to use the data as justification for a bond measure to support increased technology expenditures.

We are already hearing about new ways in which students are getting involved in planning for technology at their schools because of Speak Up Day. Some schools are setting up student technology advisory councils. Others are planning on presentations about the data to parent groups and school boards to provide student input.

And we see evidence that Speak Up Day has generated a new national awareness, at least within the education technology community, of the importance of including student voices on these issues. Many national conferences now include a student panel on their conference agendas and NetDay is consulting with many organizations on the most advantageous use of students and students' voices in their programs.

NetDay created Speak Up Day to give a voice to all stakeholders in the educational community and to frame a new conversation around education and technology. Speak Up Day events mobilize thousands of students, teachers and other stakeholders to share their ideas about the effective use of technology for learning. The quality of education for all students is enhanced by these contributions. NetDay is honored to have had the opportunity to provide a vehicle for incorporating student voices in our national dialogue on education technology and to lay the groundwork for further conversations.

**“What took you so long to ask us?”
11th grade student, Annandale, Virginia
(in response to a question about student input into
national education technology plans)**

What We Learned Overview

About the Data

The intent of NetDay Speak Up Day 2003 data collection effort was to capture the “pulse” of student views on technology and education and to provide an opportunity for every student to share their ideas in a national poll. The focus of this report is on the national findings from the data collected from the 210,000 students who participated in the online surveys from October 25 through November 3, 2003.

Students participated either through an individual online survey or through a class submitted group survey. For kindergarten through third grade students, we only provided a group style survey. For students in grades three through twelve the option existed for a student to participate either through an individual survey or a group survey. With the individual survey, students were provided with the school's Speak Up Day registration code to directly access the survey site. With the group survey, the students participated in a teacher-facilitated discussion about the survey questions and then a class representative or coordinator submitted the aggregated class responses via the group survey tool. For this report, we have analyzed both individual surveys and group surveys. We also included in our analysis both “complete” and “incomplete” surveys. In other words, each response within the survey tools was treated individually and whether the student completed all 33 questions or only 15 questions, his or her responses were still included in the data analysis.

The following “What We Learned” sections of the report zero in on the specific national findings within the context of a particular survey audience. Thus, the K-3 section contains the national findings from the data collected from students in kindergarten through third grades. The grades 3-6 section contains national findings from the data collected from students in those grades from both individual surveys and group surveys. The same process was used with the grades 6-12 section. Though each survey tool was customized to meet the developmental level and age appropriateness of the intended audience (K-3, 3-6, or 6-12), there are several questions that are similar in intent or meaning across all three survey audiences. We have reported on those findings as well as the unique questions in each survey tool. In addition, using several key questions as profiling questions, we have cross-analyzed certain data to uncover deeper insights into the national findings.

The Speak Up Day survey data is based upon a self-selected, convenience sampling of students. To participate in the online surveys, a student's school had to be registered with NetDay. Students could not participate in the Speak Up Day surveys without their school registering for the event. We did not pre-select students for participation in the surveys. We did not collect demographic data on any of the student participants beyond grade level and gender. However, we did collect school name and location and can track students' aggregated responses to a particular school. We have not completed any statistical significance testing on the data collected.

NetDay is continuing to analyze the data and responses collected through Speak Up Day 2003. State comparative data analysis, demographic data analysis and further analysis of the open-ended responses are still in process. We will release additional reports on our website, www.NetDay.org, as new findings are developed.

Overview of National Participation

Students from 3,000 schools submitted 210,000 surveys during the survey time period October 25 through November 3, 2003. The national distribution of those surveys is as follows:

Grade distribution:	K-3 (5%)	3-6 (26%)	6-12 (69%)
Gender distribution:	Female (50%)	Male (50%)	
Survey type:	Class version (70%)	Individual version (30%)	
Geography:	All 50 states, District of Columbia, Puerto Rico and US Department of Defense schools worldwide		
Community profile:	Urban (27%) (41%)	Rural (32%)	Suburban
School profile:	Charter (1%) US Department of Defense (4%) Catholic (5%)	Private (3%) Public (87%)	

Major Themes of National Findings

Today's students are very technology savvy, feel strongly about the positive value of technology and rely upon technology as an essential and preferred component of every aspect of their lives.

Students are not just using technology differently today, but are approaching their life and their daily activities differently because of the technology.

As students get older, their use of technology becomes more sophisticated, but, comparatively, the younger students are on a faster track to becoming greater technology users and advocates.

Technology is allowing today's students to be ultra-communicators. Students are using online communications tools to brainstorm school projects with classmates, to seek help on homework from a tutor, to update a cousin in another state on the family reunion and to make social plans with friends for Saturday night. All at the same time.

Students in all grades have highly developed ideas about how technology can be used more effectively within their education and want to share those ideas with the appropriate decision-makers to impact real change. Students are looking for guidance on how to effectively make a difference in their schools and communities.

**"I will fill out surveys like this one to let my thoughts be known.
I would like to have some help to learn more about technology myself.
If my teacher has any ideas, I would be willing to hear them."
9th grade student, Orlando, Florida**

What We Learned from...

Today's Tech-Savvy Students in Kindergarten through Third Grade

Today's students in grades K-3 are amazingly more technology savvy than many adults believe, including their parents and teachers. And these students are showing an early acclimation to technology that far exceeds where their older siblings were at the same developmental point. Today's younger elementary students are gamers, communicators and explorers in terms of their technology use and highly value the importance of technology in their education.

Survey Tool and Participation Rates

During the survey period, 466 classes, representing 11,332 students in grades kindergarten through third grade participated in the grade appropriate Speak Up Day online survey. The schools participating in Speak Up Day for these grades were from 30 different states and two different Department of Defense regions. Participating schools represented a healthy cross-section of urban (28%), rural (28%) and suburban (43%) schools and span the entire country per their own identification. 87% of the surveys originated from public schools, 5% from private schools, 5% from Catholic schools, 2% from Department of Defense schools and 1% from schools identified as public charter schools. The breakdown of grade distribution was as follows: kindergarten – 34% (3837), Grade 1 – 23% (2625), Grade 2 – 24% (2679) and Grade 3 – 19% (2141). Gender distribution was also very consistent with 51% of the students reported as boys and 49% of the students reported as girls. We collected both “complete” and “incomplete” surveys and have used both sets of data in this report. Of the entire body of surveys collected for Speak Up Day 2003, the participation of students in grades kindergarten through third grade represented 5% of the overall total.

Students in these lower elementary grades participated in Speak Up Day through a teacher-facilitated group discussion. After the discussion, the teacher or a designated student went online and submitted their aggregated class responses using a specially formatted survey tool for that class summary data. In addition, we asked the classes to brainstorm about how technology could be better used at their school. Those open-ended responses were analyzed in conjunction with the quantitative data. In reviewing all of the data, both quantitative and open-ended responses from the K-3 classes, we summarized our findings to address the four “Big Questions” that were the foundation for Speak Up Day 2003.

1. Who are today's students in terms of technology familiarity, proficiency and habits of use?
2. How are students using technology to help with their schoolwork?
3. How are students using technology in their free time?
4. How would students like to see technology used in their schools to improve their learning opportunities?

What We Learned

“We are learning when we play games, you know.”
1st grade class, Newark, Delaware

Today's students are gamers, communicators, and explorers.

We learned from the survey data that 29% of the students in these grades have an email address and their primary access to technology is through the school with home and public library as the next choices.

As a measure of technology proficiency, we asked the students if they knew what the Internet was; 78% of the students said yes. When asked what they do on the Internet, either at school or away from school, the students' top responses (in order of strength of response by the students) mirror their older siblings: play an online game, send an email to a friend or family member, search the Internet for a website of interest or check out their own school website.

As an interesting side note, 41% of the students believe that their teacher contacts their parents by email indicating self-knowledge of that process and recognition of the importance of communications between home and school using technology.

As a clear indication that these students value the role of technology in their education, 82% of the students said yes to the question "do you think it is important for students your age to be able to use technology?" This value statement is further solidified by other data noted below.

"We take pictures as we are doing activities and projects and post the pictures to share what we are doing in class with others."

**2nd grade class, Bavaria, Germany
(US Department of Defense school)**

Today's students are using a wide range of technology to help with schoolwork.

As a baseline question, we asked students if they use computers to help with their schoolwork. 73% responded yes. The types of computers or technology that the students use to help with their schoolwork included (in order of strength of response by the students) desktop computers, toys, calculators, laptop computers, digital cameras and e-books. The influence of certain currently popular commercial products is evident obviously in that response, specifically the electronic toys and e-books from leading toy manufacturers and the continuing popularity of electronic hand-held games.

When asked what was their favorite thing to do with a computer at school, the students' top three responses were playing learning games, creating pictures and practice spelling or reading. All of these mirror the common activities that we find with technology use in these grades.

"Technology allows us to learn about places we can't visit."

2nd grade class, Ravenna, Nebraska

Playing games is the #1 fun technology activity outside of school.

In a similar manner to the question about technology use in school, we asked a baseline question regarding the students' use of technology in their free time, outside of school. 67% of students stated that they use computers to have fun in their free time. The types of computers

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and technology used by the students outside of school also closely mirrored the use of technology within the school day. The primary response was the desktop computer again, followed by Gameboy, calculator, DVD player, cell phone and laptop computer.

Students showed a very strong preference for playing games with technology in their free time. The "playing games" response was 4x as strong as the next response, listening to music. Other top responses included making pictures and birthday cards, talking or emailing with friends or family members and making music or movies.

**"They would like to see more educational games made accessible to them during their free time, or to be able to use the school lab more than once a week."
2nd grade class, Lyndhurst, New Jersey**

Today's students have a strong desire to use more technology in school.

For this age group we instructed the teacher to ask the students to pretend that they were the principal of the school making decisions about how to spend more money on technology. The class discussion focused on items that should be a priority for that school. The top responses reported back to us were for the principal to buy more computers and printers, and to buy better software for students to use. As we will see in the report of the other surveys, these responses closely follow what the older students' desire as well.

One of the objectives of Speak Up Day 2003 was to initiate a dialogue between students and educators about education and technology, we asked students for their ideas on how to improve the use of technology at their school. Teachers were asked to submit the best ideas from their class. We also asked students who they would go to with their good idea about using technology. The top responses were "teacher" and "principal." This bodes well for our objective of a new dialogue between students and educators about technology, even at this primary elementary level.

A sampling of the good ideas submitted by classes from their brainstorming activity:

*"Make computers that hear us speak."
2nd grade students, Sleepy Hollow, New York*

*"We know that technology would be used so much more if we had more computers to use."
1st grade students, Tuscaloosa, Alabama*

*"Our class would like to have email accounts to have pen pals and share ideas."
1st grade students, Dalton, Georgia*

*"The students would like to do their homework on the computers."
1st grade students, Creve Coeur, Missouri*

*"The students feel that in order to better use technology in school the computers need to have faster connections to the Internet."
3rd grade students, Valley Stream, New York*

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*"Each student has own laptop."
2nd grade students, Lake Charles, Louisiana*

*"Buy better software, make sure the computers are working and send teachers to school to learn more about the use of the computer."
3rd grade students, Chickamauga, Georgia*

*"Have books on the computer."
Kindergarten students, Viera, Florida*

*"Give each student a PDA and a calculator to help improve their learning and math skills."
2nd grade students, Houston, Texas*

*"Our classroom's idea was to buy better software and gaming options for the class. Students want them to be fun, creative and helpful in learning."
1st and 2nd grade students, Morristown, New Jersey*

Pushing the Envelope

Today's tech-savvy students in lower elementary grades are already pushing the envelope in terms of using technology, both for their schoolwork and in their free time. For these students, technology opens up their world to greater learning, greater communications and greater fun. As with their older peers, they are frustrated by obstacles that prevent them from fully realizing and enjoying the benefits of technology to impact learning, both formally and informally. And, like their older peers, the students in grades kindergarten through third grade have good ideas about technology use and those ideas should command the attention of their educators, parents and community leaders.

End Notes

Kindergarten through third grade students who participated in Speak Up Day 2003 utilized a group survey. Teachers were provided with a lesson plan and instructions on how to facilitate this group survey. The survey tool and lesson plan can be reviewed online at www.NetDay.org. It was recommended in the instructions that the teacher complete Q1 – Q5 for their class using either poll data from the students or their own information. Q6 – Q17 are set up for class discussions with the teacher collecting and aggregating the group/class responses. With the exception of Q17, all of the questions in this survey are in multiple choice or yes/no format. Also, it should be noted that students in grade 3 had the option to participate in the 3-6 individual survey format and provide individual results. That data is included in the appropriate section of this report. A complete summary of all of the quantitative questions from this survey can be found in the Appendix of this report.

What We Learned from...

Today's Tech-Savvy Students in Grades 3 through 6

Students in grades 3 through 6 are active technology users who place a high value on access to technology in school. Within this grade span we see two interesting trends developing: first the emergence in 6th grade of email as a primary use of technology over gaming and second, the development of a new digital disconnect between the students that assess themselves as “advanced” in terms of technology knowledge versus students who see themselves as beginners with technology. With the first trend, the growing acceptance of email as a means of communications between younger students is both a new challenge for teachers and parents and a reflection of a new standard for communications within our society. The advanced students’ use of technology, familiarity with technology-based tools, and their entire approach to their education is markedly different from the self-labeled beginner student. We believe that this new disconnect, emerging as young as 3rd grade, has implications for schools of today and schools of the future.

Survey Tool and Participation Rates

During the survey period, 54,253 students in grades three, four, five and six participated in the NetDay Speak Up Day surveys. 18,334 students provided their views through the individual survey tool; 35,919 students participated via a group or class facilitated discussion and survey. Across both access vehicles, individual surveys and class surveys, schools were located in 40 states and four different Department of Defense school regions. Participating schools represented a healthy cross-section of urban (25%), rural (33%) and suburban (42%) schools and span the entire country per their own identification. Averaging the group survey set with the individual survey set, 86% of the surveys originated from public schools, 3% from private schools, 5% from Catholic schools, 5% from Department of Defense schools and 1% from schools identified as public charter schools. The breakdown of grade distribution averaged across both group and individual surveys as reported was as follows: Grade 3 – 9% (2013), Grade 4 – 30% (7062), Grade 5 – 39% (9257) and Grade 6 – 22% (5195). Gender distribution was also very consistent with 50% of the students reported as boys and 50% reported as girls. We collected both “complete” and “incomplete” surveys and have used both sets of data in this report as noted earlier. The participation of students in grades three through six represent 26% of the overall total.

NetDay provided schools upon registration with two survey vehicles for participation in Speak Up Day 2003. Schools then customized their own Speak Up Day involvement according to local mores and desires. In some schools, teachers took advantage of the lesson plans prepared by NetDay about student civic engagement and technology uses in education and facilitated a class discussion that led to either individual survey submissions or a group submission. In other schools, time was designated during the school day for the students to go online and complete the surveys individually. And still other communities provided students with the school’s NetDay registration “secret code” and encouraged them to self-submit either after school, in school labs, or from home.

The questions on the individual survey closely mirrored the questions on the group survey. In addition to the multiple choice or yes/no questions on the survey, we also asked students in these grades to respond to two open-ended questions. Students were asked to submit one

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good idea for using technology at school and students were also asked to think about three ways in which they could personally be more involved with technology decision-making at their school. Those open-ended responses were analyzed in conjunction with the quantitative data. In reviewing all of the data, both quantitative and open-ended responses from the Grades 3-6 students, we summarized our findings to address the four "Big Questions" that were the foundation for Speak Up Day 2003.

1. Who are today's students in terms of technology familiarity, proficiency and habits of use?
2. How are students using technology to help with their schoolwork?
3. How are students using technology in their free time?
4. How would students like to see technology used in their schools to improve their learning opportunities?

What We Learned

**"I think we should be able to go anywhere and be able to do anything
with technology."
6th grade student, Avondale, Arizona**

As today's students grow up, they are using technology more and more.

In general, the results from the individual surveys and the group surveys were very similar. We will highlight areas where the responses are markedly different and discuss some possible explanations for those differences. We are also able to provide some additional insights into this data by cross tabulating some of the individual survey data.

We learned that on average 45% of the students in our survey sets have email addresses. There is a slightly larger group of girls with email addresses in this category than boys (girls – 48%, boys – 43%). We noted a marked increase in students with email addresses from third grade (34%) to sixth grade (56%).

Students' use of technology as an indicator of familiarity and proficiency followed a similar pattern to younger elementary students. The devices most frequently mentioned were the desktop computer, cell phone, laptop computer, CD burner and digital camera. In terms of common Internet activities, the students responses from the individual surveys were as follows in order of strength of response: playing an online game, visiting a favorite website and searching for information. The group responses were the same, only in different order with "visiting a favorite website" as number one and "online gaming" as number two.

We asked students how they found out about new technology and Internet sites to assess the influencers on this student set. For the individual surveys, the top responses were as follows: friends or siblings (34%), parents (23%), class at school (20%). For the group surveys, we again noted similar responses but in a different order: a class at school (29%), parents (23%), exploring on my own (22%) and friends or siblings (20%). As with the Internet activities question above, we wonder if students contextualized their response in the group surveys. Did students in the teacher-directed discussion vote for the "class at school" as their primary source for information because they intrinsically believed that is what the teacher wanted to hear?

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To learn more about their perceptions and attitudes, we asked students three attitudinal questions in three separate parts of the survey. We asked students to self-assess in terms of their technology knowledge relative to their peers, and we saw a marked difference between the results of the individual surveys and the group surveys. The individual survey allowed for greater privacy and, maybe, less bravado. 23% of students ranked themselves as “knowing more” than their peers (“advanced students”) in the individual survey set, and 38% of students in the group survey claimed that same label. Of the individual survey students, 61% considered their knowledge “to be the same” as their peers (“average student” profile) compared to 49% of students taking the group survey. In terms of “knowing less” than their peers (our “beginner student” profile), 16% of individual survey participants and 13% of group participants chose that label.

Looking more deeply at the individual data from that question and comparing it to other factors, we find that girls rated themselves as advanced to a lesser degree than the boys. In addition, we noted that while the percentage of students viewing themselves as advanced stayed consistent from grade 3 through grade 6, there was a marked decrease in the number of students assessing their level as beginner over those same grades (21% of 3rd graders assess themselves as beginners, only 14% of 6th graders state the same level).

As a second attitudinal question, we asked students to choose the statement that most closely represented his or her beliefs and feelings regarding technology use. We used this as another profile indicator about our survey students. The group and individual survey sets showed little differences on this question.

*I **avoid** using technology as much as possible – 6%*

*I use technology a lot but it's just a **tool** for me, not a hobby – 23%*

*I **enjoy** working with technology and learning new ways for me to use it – 55%*

*I often **help** my friends with their technology problems and I like showing them how to use technology in different ways – 16%*

We did, however, see some representative trends by reviewing the responses to this question with the self-assessment of technology knowledge responses. Beginner students were three times as likely to agree with the statement “I avoid technology as much as possible” than advanced students. Beginner students also had a stronger preference for the statement: “I use technology a lot but it’s just a tool for me” that the other groups (30% of beginner students agreed with that statement, only 17% of the advanced students). Advanced students were twice as likely to agree with the statement: “I often help my friends with technology problems” than the average students or the beginner students.

Finally, we asked the students to agree or disagree with this statement: “Do you think it is important for students your age to be able to use technology at school?” For both the individual survey set and the group survey set, the response was very strongly positive with 95% of the students agreeing.

From the students’ own self-assessments and their stated uses of technology we begin to see the emergence of this new digital disconnect between high technology users (the advanced

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students) and their peers who rate themselves as beginners in technology use and skill. This new digital disconnect is very instructive in setting a context for the rest of our analysis.

**“A good idea for technology would be to have computers that talk.
And if we could see the person we were emailing.”
3rd grade student, Ramstein, Germany
(US Department of Defense School)**

At the leading edge are the “advanced tech-savvy students.”

As a foundation question, we asked students if they used technology to help with their schoolwork. An average between both survey vehicles of 75% of students said yes. Only 18% of advanced students said they did not use technology to help with schoolwork as compared to 38% of self-assessed beginner-level students.

We then asked about the location of the students' interaction with technology to help with schoolwork. 57% of the individual survey responses and 44% of the group responses indicated home as the primary location. A smaller amount of students noted school as the primary location (27% of the individual surveys, 29% of the group surveys). When asked where at school students most often used technology, we noted a discrepancy between the two survey vehicles. 68% of the individual surveyed students and 49% of the group survey students selected the computer lab as the primary on-campus computing location. Only 20% of students in the individual survey named their primary location as a classroom setting, but a stronger contingent of group survey students chose that location.

We posed a question about obstacles at school that prevented the students from using technology. In the group survey format, this was a small group discussion topic. From both the group surveys and the individual surveys, we received the same three responses as the top obstacles: computers that don't always work well, no time to use them and not enough computers. The group surveys had the response “not enough computers” as their primary response.

To assess the level of proficiency and acceptance in using technology for schoolwork, we asked students to identify a likely first step in writing a school report from a list of typical school activities, both traditional and electronic. On average between the group respondents and the individual respondents, 43% of the students chose a technology-based solution as their first step in writing a school report: either doing a search online or going back to a website previously visited for more information. The second choice for the students in both sets was the school library at 19% of students. Most striking in these responses was low response for using a textbook: 8% of students in the individual survey and 1% of the group survey respondents.

When viewed from the students' own self-assessment profiles, the data is also very revealing. Advanced students were almost twice as likely as beginner-level students to approach a school report with a technology solution (either an Internet search or revisiting a website): 57% of advanced students compared to only 37% of beginner students indicated a technology response. 30% of beginner level students said that their first step would be to go to the school library; only 19% of advanced students indicated taking that same first step.

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On a grade-by-grade comparison, 3rd graders were the only grade to indicate that the library was their first choice. In increasing intensity, 4th graders (28%), 5th graders (34%) and 6th graders (42%) chose a technology-based option as their first choice.

As another indicator of proficiency and assimilation of technology into daily activities, we asked students to select their online activities from a list of common school-based Internet activities. Once again the top three responses were the same for both the group and the individual surveys – the priority order was simply different. The relative strength of each response however was comparable. The three responses (from the individual surveys) are: do research for a report; take a test online; and go to websites that are set up for the class or school.

**“A game with learning about all subjects would be fun.”
5th grade student, Alabaster, Alabama**

It's all about gaming . . . until 6th grade.

In our quest to learn more about how students use technology outside of school, we encountered few surprises. The primary access point for students (71%) to use technology outside of school is the home with the library being second at 12%. 6% of the students responded that they did not have access to technology outside of school. When asked about what activities they had done online, the responses were very similar between the two survey sets. The top vote-getters in order of response popularity were: played an online game, returned to a favorite website, listened to downloaded music, checked on a sports team schedule, sent out party invitations online, and visited an online museum.

Regarding the students' number one use of technology outside of schoolwork, the responses between the two survey sets were similar. The number one response was “playing games” with a strong 49% response. Talking to or emailing with friends or family was second with 18%, and listening to and downloading music was third with 17% of the students stating this as their number one activity.

In reviewing this data in conjunction with other individual survey data, we identified a gender difference. While both boys and girls chose playing games as their first choice activity, there was a marked difference in intensity. For the boys, 49% said playing games, 10% said talking or emailing friends and 9% said listening to music. For the girls, 29% said playing games, 21% said talking or emailing friends and 16% said listening to music. This 20-percentage points difference in the preference to play games between the boys and the girls is not unexpected but definitely noteworthy.

There was no marked difference in these rankings when evaluated across self-assessment levels – consistently, 45% of advanced, average and beginner level students expressed their number one use of technology as game playing. On a grade-by-grade comparison, playing online games was also the consistent first choice. More interestingly, however, was the growth of talking and emailing as a strong emerging second preference by 6th graders with a growth of 12 percentage points from 3rd grade to 6th grade for this category. This parallels the growth in email addresses for 6th graders noted earlier in this report.

**“I think if you get more technology at school, the
students would learn more.”
6th grade student, Whitestone, New York**

Students understand the value of technology in education – better than we do.

We asked these questions to gain a better understanding of how today's students would like to use technology at their school and to learn more about the type of educational system that today's students envision for themselves. To achieve those goals we structured two types of questions: a set of “what-if” multiple-choice questions and two open-ended questions for student ideas.

In the group survey, we instructed the teacher to set up three small discussion groups to address three prototypical education technology issues at the school: a budget group, a school planning group, and a tech support and maintenance group. In these small discussion groups, students were empowered to brainstorm possible solutions and then, prioritize and justify their recommended responses to the entire class. We have heard from several teachers who implemented the survey that this part of the exercise was especially helpful for opening up a new dialogue about the use of technology and education. We addressed the same types of questions with the individual survey students through direct “what-if” questions.

In the first scenario, students were asked to imagine that they were the school principal and that they had a budget to spend on technology. What technology products or solutions should the principal spend more money on first? The number one response for both the group survey set and the individual survey set was: “buy more computers and other things like printers, scanners and digital cameras.” It is noteworthy that this response was chosen over options: “faster Internet connection, better software, onsite support people, and teacher training.”

In the second pretend scenario, students were asked to think of themselves as new school designers. If they were designing a new school for students just like themselves, which of a list of technology solutions and products would be most important for that new school. Both the group survey set and the individual survey set chose the same first two responses: “new computers for students to use” and “computer labs that stay open after school and on weekends.” For these students, access to technology is obviously not yet a non-issue.

As an approach to opening up a specific dialogue around the impact of technology on students and learning, we asked the students to identify their top 3 benefits for a highly technology infused learning environment. The top 3 benefits were the same for both the group survey set and the individual survey set (in order of strength of student response): “students would learn more,” “students would get higher grades in class and on tests,” and “school would be more fun.” The student perception of the impact of technology on learning is obviously very direct and personal.

To continue to address the objective of initiating a new conversation between students and educators about education and technology, we asked the students for their ideas on how to improve the use of technology at their school. For the group survey set, the teachers were asked to submit the best ideas from their class to us as part of this process. Most of the individual survey students took advantage of the opportunity to provide a short answer. We also asked students to tell us whom they go to with their good idea. From a list of 8 community and

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school authority figures, the students in both the group survey set and the individual survey set chose the same top three responses: teacher, principal and tech coordinator/librarian.

The second open-ended question was: "What are 3 things that you can do to get more involved with decisions about technology at your school?" Once again, this question was posed to initiate a new thought process and dialogue around the role of student voice and input into local decision-making about technology.

A sampling of the open-ended responses include:

Question: Think about your own use of technology and your classes in school. Can you think of a way that your teachers or your school could use technology better?

*"I would put 30 computers in each classroom."
5th grade student, Puerto Rico (US Department of Defense School)*

*"I think that our tests should be online."
4th grade student, Memphis, Tennessee*

*"I think that it would be a good idea for our libraries to have laptops for students to be able to check out."
5th grade student, Chicago, Illinois*

*"You should have more projects that are online. Make technology more fun."
6th grade student, Whitestone, New York*

*"Instead of hard books, we could have them on a laptop."
6th grade student, Little Ferry, New Jersey*

*"I think that the teachers should give us more computer time. I think going on the computer will give us a fun way to learn."
4th grade student, Carle Place, Nevada*

*"Students should be able to use email in school."
5th grade student, Cumberland, Wisconsin*

*"They could use it better by using it everyday and teaching with it everyday."
5th grade student, Novato, California*

*"Set up an afterschool lab."
5th grade student, Baldwin, Louisiana*

*"That students can use technology anywhere in the school."
5th grade student, Gloucester City, New Jersey*

Question: What are three things that you plan to do to get more involved with decisions about technology at your school?

*"I plan to be in the computer club where I can talk about what I think."
5th grade student, Hoover, Alabama*

*"I would tell the principal that we should use more technology at our school."
5th grade student, Lake Havasu City, Arizona*

*"Be president of the Student Council."
6th grade student, Ashland, Massachusetts*

*"I would donate money for faster Internet connections. I would also try to get kids involved in choosing what technology we have. Finally, I would try to start a petition to try and get what kids want."
5th grade student, Spring City, Pennsylvania*

*"Take more surveys about technology."
5th grade student, Lyndhurst, New Jersey*

*"I plan on talking to my parents about getting more involved with newer technology."
4th grade student, Saginaw, Michigan*

*"The thing that I plan to do is do some research on technology at my school, see how much technology the school has and what they use technology for."
6th grade student, Dover, Delaware*

*"Learn more about technology, listen more about technology, ask more about technology."
4th grade student, Kaiserslautern, Germany (US Department of Defense school)*

*"We could start a tech club."
5th grade student, Milpitas, California*

*"I would like a mini-Congress so that everyone can be in on the decisions."
4th grade student, Germantown, Tennessee*

Tomorrow's Technology Innovators

Today's tech-savvy students in grades 3 through 6 are tomorrow's technology innovators. These students are expert gamers and emerging communicators. They are creative in their ideas for how technology could be better used and demonstrate a surprising eagerness to get involved with very specifically defined school issues at a young age. They are fearless, self-assured and enjoy using and learning about technology. Our schools and communities can learn a lot about how to prepare for the future by listening to and observing today's innovators in grades 3 through 6.

End Notes

Students participating in Speak Up Day 2003 in grades three through six had two vehicles for input; a group survey facilitated by their teacher or another educator at their school, or through an individual survey format. In most cases, the teacher or school coordinator chose the vehicle for student input. Teachers were provided with a lesson plan and instructions on how to facilitate the group survey or prepare for the individual survey. The group survey includes student poll data, whole class discussions and small group discussions. The majority of the questions in both the group survey and the individual survey were multiple choice or yes/no questions. Both the group survey and the individual survey included two open-ended questions. It also should be noted that schools were given flexibility to have their grade 3 students participate via the K-3 group survey or to have their grade 3 students use the grades 3-6 survey vehicles. A complete summary of all of the quantitative questions from both the group survey and the individual survey can be found in the Appendix of this report.

What We Learned from

Today's Tech-Savvy Students in Grades 6 through 12

Technology is not a noun for students in grades 6 through 12, but rather an active verb. Today's tech-savvy students are very masterful communicators using email and IM in new ways that surprise their teachers and parents. They are astute at leveraging technology capabilities to meet both new and traditional education challenges and assignments. There is very little in their lives, both in school and out of school, which is not infused or interwoven with a technology element. Technology access is an essential, relied upon component of their lives. And yet, many of our students say that they are encountering obstacles within the education establishment that limit their desires to learn in their own way, at their own time and at their own pace. Surprisingly, these students want to be more involved with local decision-making around technology and want to share their ideas and recommendations on how to use technology more effectively within education. From this survey group especially, we hear a wake-up call to listen and learn from our students.

Survey Tool and Participation Rates

During the survey period, 143,942 students in grades six through twelve participated in the NetDay Speak Up Day surveys. 42,882 students provided their views through the individual survey tool; 101,060 students participated via a group or class facilitated discussion and survey. Across both access vehicles, individual surveys and class surveys, schools were located in 49 states and four different Department of Defense school regions. Participating schools represented a healthy cross-section of urban (25%), rural (29%) and suburban (46%) schools and span the entire country per their own identification. Averaging the group survey set with the individual survey set, 87% of the surveys originated from public schools, 3% from private schools, 6% from Catholic schools, 3% from Department of Defense schools and 1% from schools identified as public charter schools. The breakdown of grade distribution averaged across both group and individual surveys as reported was as follows: Grade 6 – 7% (5576), Grade 7 – 22% (17,926), Grade 8 – 18% (14,103), Grade 9 – 15% (11,739), Grade 10 – 12% (9426), Grade 11 – 13% (9900) and Grade 12 – 13% (10,393). Gender distribution was also fairly consistent with 52% of the students reported as boys and 48% reported as girls. We collected both “complete” and “incomplete” surveys and have used both sets of data in this report as noted earlier. The participation of students in grades six through twelve represent 69% of the overall total.

NetDay provided schools upon registration with two survey vehicles for participation in Speak Up Day 2003. Schools then customized their own Speak Up Day involvement according to local mores and desires. In some schools, teachers took advantage of the lesson plans prepared by NetDay about student civic engagement and technology uses in education and facilitated a class discussion that led to either individual survey submissions or a group submission. In other schools, time was designated during the school day for the students to go online and complete the surveys individually. And still other communities provided students with the school's NetDay registration “secret code” and encouraged them to self-submit either after school in school labs or from home.

The questions on the individual survey closely mirrored the questions on the group survey. In addition to the multiple choice or yes/no questions on the survey, we also asked students in

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these grades to respond to two open-ended questions. Students were asked to submit one good idea for using technology at school and students were also asked to think about three ways in which they could personally be more involved with technology decision-making at their school. Those open-ended responses were analyzed in conjunction with the quantitative data. In reviewing all of the data, both quantitative and open-ended responses from the Grades 6-12 students, we summarized our findings to address the four "Big Questions" that were the foundation for Speak Up Day 2003.

1. Who are today's students in terms of technology familiarity, proficiency and habits of use?
2. How are students using technology to help with their schoolwork?
3. How are students using technology in their free time?
4. How would students like to see technology used in their schools to improve their learning opportunities?

What We Learned

**"It is a great idea for students to be able to communicate with each other throughout the day with IM. And it would be nice to just IM a teacher in class if you had a question."
6th grade student, Plano, Texas**

The great communicators – today's tech-savvy students.

We cannot underestimate the importance of online communications for today's students in grades 6-12. Email and instant messaging are not technology tools for these students, they are a fundamental way for today's technology natives to interact and relate with their peers. What may appear to many adults to be trivial communications is in fact a new communications style that is based upon instant feedback and short bursts of information exchange. 80% of the students told us that they have at least one email address and 22% have four or more email addresses. Likewise, 76% of the students have at least one instant message (IM) screen name and 26% have four or more IM personal screen names. Demonstrating the wide range of these communications capabilities, 73% of the students also communicate with friends and family members who live outside of their area via email or IM at least twice a month. Email and IM are the most popular uses of the Internet for these students.

Today's tech-savvy students view online communications as a very personal exchange medium, not a cold, impersonal machine-to-machine operation as many adults do. To underscore that, we asked the students if they knew more of their friends' IM screen names than their home phone numbers. 54% of the students said yes. This percentage was consistent whether the students took the individual survey or participated in the group survey format or whether the student was a girl or boy. We believe that the 9th grade cohort may be a leading edge in terms of acceptance and assimilation of IM technology. 62% agreed with the statement about knowing more IM screen names; the highest group within the entire span of seven grades.

As with the younger students, we posed three attitudinal questions to the students to use for profiling in cross analysis. First, we asked students to assess themselves in terms of their own technology knowledge relative to their peers. Averaged between the individual survey respondents and the group participants, 27% of the students considered themselves an

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“advanced tech user – more expert than most of the students at their school,” 59% chose the “average tech user” label and 14% view themselves as beginners in terms of tech skills. As with the younger students, a greater percentage of boys than girls view themselves as advanced.

As with the younger students, we observed behavioral shifts along the lines of how the students perceived their technology skills. 91% of advanced students have at least one email account, but that percentage drops to 58% for the beginner cohort,. This same pattern follows in terms of IM usage. 85% of advanced students report at least one IM screen name; while only 52% of the self-assessed beginners have an IM screen name. When asked about familiarity with their friends IM screen names, only 36% of the beginners knew more of their friends' screen names than phone numbers.

As a second attitudinal question, we asked students to choose the statement that most closely represented his or her beliefs and feelings regarding technology use. We used this as another profile indicator about our survey students. The group and individual survey sets showed little differences on this question. The percentages also very closely parallel the students in grades 3-6.

*I **avoid** using technology as much as possible – 6%*

*I use technology a lot but it's just a **tool** for me, not a hobby – 30%*

*I **enjoy** working with technology and learning new ways for me to use it – 47%*

*I often **help** my friends with their technology problems and I like showing them how to use technology in different ways – 17%*

In regards to our third attitude style question, we saw little difference between the individual participants and the group participants. When asked about the importance of having technology access to one's education, 95% of the students responded that it was either important or very important.

Students impressed us with their self-determination regarding technology use. 48% of the students told us that they learned about technology on their own. Within the advanced student population that percentage jumped to 62%. Students also looked to their friends and family to find out about new technologies. For the students who took the individual surveys, exploring on one's own, friends, family and TV or radio were the primary sources for information about new technologies and Internet sites, far surpassing the recommendations of teachers. Students rely upon their informal learning environments and networks to learn about technology rather than the traditional knowledge source: school.

“I personally think that students should be given a device that stores information that is required to be taken to every class of the day. Then you wouldn't have to worry about lost information. Plus have a copy you can email yourself from home.”

**8th grade student, Okinawa, Japan
(US Department of Defense school)**

Students are approaching their schoolwork from a technology angle.

Students use technology to help with their schoolwork, but not necessarily while they are at school. 84% said that they use technology regularly as part of their schoolwork, but only 27% indicated that school is the prime location for that activity. Home is the preferred location. While at school, 49% of the students use technology in a computer lab and 30% are in a classroom.

To gain an additional student perspective on the use of technology within their school day, the students were asked to identify the top three subject areas that they believed were using technology effectively. Science, social studies or history and English were the top vote getters. When asked why they believe technology is used effectively in those particular classes, the students' responses included having computers connected to the Internet, having conveniently located computers, and teachers making assignments that required technology use.

When we asked the individual survey participants about any obstacles that prevent more technology use at school, the top responses were lack of time in the school day to use computers or to access the Internet, slow access time to get on the Internet, and school filters. We probed how students felt about filters and firewalls at their school and the poll was almost an even split. 42% of the students (averaged between the individual surveys and the group surveys) felt that filters were good, 41% felt they were obstacles, and 17% agreed with the statement that filters are only for the unmotivated and they could get around most filters to get to the sites they wanted. When comparing the 6th grade response to the 12th grade response about filters, we observed a flip in attitudes. 59% of the 6th graders felt that filters were good and 21% felt they were obstacles. By 12th grade, only 27% of the students felt positively about filters and 54% felt they were obstacles.

We also asked the students to comment on a new and emerging trend of using students to provide tech support. 61% of the students who had student tech teams at their schools felt positive about student tech support.

To more fully understand the pervasiveness of technology as an essential component of schoolwork today, we asked the student to respond to the following question: "If you had to write a report or essay today about a topic that you knew little or nothing about, what would you do first?" Given a list of print/media options (get a library book, look in a textbook), people-oriented options (ask a teacher, ask a friend), or technology solutions (do an Internet search, visit a website), the technology-based options were a resounding first choice for 67% of the students taking the individual surveys. Only 10% choose the library option and only 5% said they would look in their textbook. For the advanced students, 74% of them turn to a technology-based solution first. Only 46% of the self-assessed beginners chose that option. This demonstrates not only the real disconnect between the advanced and beginner students in terms of their approach to technology use, but it also highlights a challenge for teachers and schools trying to address needs of both cohorts.

“Technology would be better maybe if the teachers talked about how technology changed our lives and how technology relates to any of the subjects we are doing.”
6th grade student, Brooklyn, New York

Technology is an essential component for all aspects of today's student life.

As we found with the other survey groups, home is the predominant location for access to technology outside of school. In their personal time, students use technology predominantly to email and talk with family and friends. 43% of the individual respondents listed email as their #1 activity with 31% citing gaming as their favorite technology pastime, followed by listening to and downloading music with 17%.

Looking at this through a gender lens, boys are stronger gamers with 44% listing online gaming as their first choice compared to 15% of the girls. The girls' preference is for the communications capabilities of the Internet with 57% telling us that is their #1 activity on the Internet. Crossing this data with the student self-assessments, we learn that for the advanced and average tech users, email is their #1 choice but for the beginners gaming is their #1. There also appears to be an age differential regarding personal use. While 46% of the 6th grades are first and foremost gamers, only 19% of the high school seniors indicated the same. Gaming is popular with this student group yet it appears that the typical gamer is most likely a middle school boy.

To assess the depth of the students' reliance on technology for all aspects of their lives, we asked two “what if” questions. If you no longer had access to the Internet, what would be the impact on your school life and on your personal life? 82% of the students told us that losing the Internet would have an impact on their schoolwork; 78% said the same about their personal life. For today's students, technology access is not an extra, but an essential.

“We should get PDAs to help organize ourselves. Laptops with wireless cards so that we can access the Internet and the network both at home and at school.”
8th grade student, Mendham, New Jersey

Schools of tomorrow for today's students – bring on ubiquitous technology access.

Today's students are frustrated by their schools' limitations on technology use. When asked what they like to see changed at their school regarding technology, the students want to use email and IM at school. This follows what we learned from the students themselves about the value that they place on these communications vehicles and how important access to these tools are to their daily activities. Given the pervasiveness of email and IM in their “outside of school” lives, it is incongruent to them to not have those same capabilities available in school.

As with the younger students, we asked these students to take on the role of decision-making with a school's technology budget. As part of a recommendation committee, what should their school spend more technology dollars on? Both the individual and group surveys revealed a very strong desire for more computers. When asked to imagine designing a new school for students just like themselves, both survey sets choose the same three technology components:

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fast, wireless access throughout the school; new computers for student use throughout the school; and computer labs that stay open after school and on weekends. Today's tech-savvy students do not want to be limited as to where and when they use technology. They want ubiquitous technology access that follows them in their learning pursuits, not a game of hide-and-seek to find accessible technology resources.

Next we asked students: if such an environment existed and your school had lots of technology in place, what would be the impact on your education? From a list of 10 different responses, students chose the following as their top 4 answers:

- students would learn more
- school would be more fun
- student projects would be better
- student would get higher grades in class and on tests.

Despite ongoing national questions about the value of technology in education, the students appear to have the answers. For today's students, technology enhances their education in every way – learning, school engagement, and student achievement.

In addition to the quantitative responses, students provided interesting responses to two open-ended responses. First, we asked the students about their own good ideas on how technology could be better used by their teachers or in their school. Second, in our quest to spark local conversations about the role of students in technology decision-making, we asked the students themselves to think about 3 ways in which they could be more involved with those decisions at their school. We were duly impressed by both the quantity and quality of the responses that we received to these questions. Today's tech-savvy students have good ideas about technology use, and they want to help improve their schools and communities.

A sampling of those responses from the two open-ended questions include:

Question: Think about your own use of technology and your classes in school. Can you think of a way that your teachers or your school could use technology better?

“Schools should make online classes available to more students. It would allow students to work at their own pace and take classes that otherwise the school could not offer (because of class size).”

11th grade student, Orlando, Florida

“I think that teachers should email their students at least every 2 weeks so that the students know how they are doing.”

7th grade student, Chicago, Illinois

“Let students check email and have fast Internet access and more time on the computers for research.”

6th grade student, Knoxville, Tennessee

“The teacher should conduct review sessions online in an Internet chatroom.”

12th grade student, McMurray, Pennsylvania

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*"I think that there should be a PDA assigned to students instead of a planner."
7th grade student, Renton, Washington*

*"Get new and updated computers that run faster so that we can learn more. Also, to set up a free email account for every student in the school."
8th grade student, Worcester, Massachusetts*

*"I think it would be really cool if instead of textbooks we had computers and our textbooks were on the computers. That would be awesome."
8th grade student, Birmingham, Alabama*

*"Allow students to access the school network from home."
10th grade student, Fairbanks, Alaska*

*"My idea is that every student would have unlimited access to the Internet."
8th grade student, Martinsville, Virginia*

*"I think that there should be extra time after school for students to have access to the school's computers."
11th grade student, Hope Mills, North Carolina*

Question: What are three things that you plan to do to get more involved with decisions about technology at your school?

*"I plan to get on the student council, speak up, try to help others with technology problems and learn more about technology."
7th grade student, Winnetka, Illinois*

*"I would help with fundraisers to purchase new school technology."
10th grade student, Norwich, Connecticut*

*"I would tell my teacher my ideas. I would show more enthusiasm in my work. I would make sure that my ideas are heard."
12th grade student, Athens, Alabama*

*"Find a website that offers discounts to schools for technology so we get more cheaper."
9th grade student, Lakeville, Massachusetts*

*"I would have a meeting with the administration to talk to them about it."
12th grade student, Pasadena, California*

*"Talk to my teachers about it, get a principal to look at the ideas, and prove that we deserve to have that technology."
8th grade student, Conyers, Georgia*

*"I would like to start a council of students and teachers that will help to decide what upgrades will be applied to computer labs and classrooms."
12th grade student, West Bloomfield, Michigan*

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*"Get a business to donate some money to buy new computers."
7th grade student, Ravenna, Nebraska*

*"I plan to find out how and what the school is spending the technology budget for. When I find that out I would see if the school could spend it on better technology."
8th grade student, Hackensack, New Jersey*

*"One of the things I would do is to make a website for my opinion and way of thinking. I would persuade them in the website. I will sent it through email and have all of my friends and people around the world sign onto it."
10th grade student, Lafitte, Louisiana*

*"I would try and get a group of students who agree with me to sign a petition about the use of technology. I would also make suggestions to the principal and the technology coach."
12th grade student, Kernersville, North Carolina*

Paving the way for a new definition of technology in education

Today's tech-savvy students in middle and high schools all over the United States are re-defining what it means to integrate technology within education. They are using email and IM to facilitate group project brainstorming and development – the use of the multiple telephone calls or the project study group over pizza is no longer as effective. They are learning about new technologies from sources that are beyond the purview of the established education hub, the school. They are exploring the boundaries of online gaming to learn critical thinking skills and problem solving techniques. They are comfortable with students playing a key role in technology support on school campuses while many adults are still pondering the pros and cons. They very deeply understand the value that technology brings to their education and their future. Despite frustrations with the constraints, they expressed a sincere interest in participating in the decision-making process at their school and sharing their ideas to make their schools better for their tech-savvy younger siblings and peers.

End Notes

Students participating in Speak Up Day 2003 in grades six through twelve had two vehicles for input; a group survey facilitated by their teacher or another educator at their school, or through an individual survey format. In most cases, the teacher or school coordinator chose the vehicle for student input. Teachers were provided with a lesson plan and instructions on how to facilitate the group survey or prepare for the individual survey. The group survey includes student poll data, whole class discussions and small group discussions. The majority of the questions in both the group survey and the individual survey were multiple choice or yes/no questions. Both the group survey and the individual survey included two open-ended questions. It also should be noted that schools were given flexibility to have their grade 6 students participate via the 3-6 surveys or to use the grades 6-12 survey vehicles. A complete summary of all of the quantitative questions from both the group survey and the individual survey can be found in the Appendix of this report.

A NetDay Call to Action

It is often said that you need to know where you have been to know where you are going. NetDay Speak Up Day for Students 2003 provided us with a new and unique foundation of knowledge, students' authentic and unfiltered perspective on the use of technology in their education today. It is our collective responsibility now to use that knowledge to continue to encourage students' input in education decisions, to help our schools and communities learn how to effectively engage and leverage student voices, and to sustain this new national awareness on the importance of including our students in discussions on education and technology policies. NetDay invites other interested organizations, government agencies, foundations, corporations and community groups to join us in our advocacy for student voices.

To frame this call to action, let's review our Speak Up Day 2003 goals and assess our success.

Goal #1: To collect authentic, unfiltered input from K-12 students about their use of technology and their ideas on how technology should be used within their education.

With 210,000 students participating in our online Speak Up Day surveys from all 50 states, the District of Columbia, Puerto Rico and many US Department of Defense schools worldwide, our data and national findings are a significant contribution to the development of new national policies for education technology. We are also actively informing and enlightening state governments, local school districts, community organizations, national associations and corporations about students' ideas. That sharing of knowledge and continuing to drive the awareness of the importance of student input will result in more targeted and meaningful programs and policies at all levels. School districts are using their own Speak Up Day data in their planning for staff professional development. School principals are using the data for parent presentations and to justify school technology expenditures. The collection of authentic, unfiltered input from 210,000 K-12 students is a significant success outcome of Speak Up Day 2003.

For this report, we provided national findings on the data collected. There is much more analysis to be done with the data including state-by-state comparatives and demographic analysis. NetDay is actively seeking new partnerships to help us with that analysis. We are especially interested in posting new findings from the data so that others may use it for their planning and decision-making on technology in schools. Interested individuals and organizations should sign up to be part of our information listserv to get updates on new findings and reports (http://www.netday.org/speakup_join.htm).

It is also our intent to continue to collect authentic, unfiltered input from all of the stakeholders in the education community around topics of interest such as technology. Based upon feedback from Speak Up Day for Students, we are planning a Speak Up Day event exclusively for teacher's voices and views on technology. Speak Up Day for Students will be an annual event and we will use the data collected in follow-on years to further enlighten the policies and programs that impact students. The process of providing an online, easy to use vehicle for collecting a student "pulse" on a subject of interest has wide appeal. We are currently exploring other educational subjects of interest and working with several national organizations to use the Speak Up Day model as either a pre-evaluation tool for program development or as a feedback mechanism to gather authentic, unfiltered data from key stakeholders (such as students) about educational program effectiveness and impact.

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We know that our partnerships were a contributing factor to the success of Speak Up Day and we look forward to exploring new partnerships with organizations interested in the collection, analysis and dissemination of data and findings from Speak Up Day events.

Goal #2: To use the event to start local conversations between students and teachers, students and parents, students and community about decisions that impact their education, like technology.

Speak Up Day 2003 created a framework for new and different conversations to take place in classrooms, in schools and in communities about the role of technology in education. The difference in these new conversations is the inclusion of students as a participant and purveyor of unique knowledge. It has long been accepted that today's students are technology natives, and that the adults are the immigrants to our information and technology intensive universe. As we learned through our Speak Up Day findings, the students are not just more technology-savvy but their approach to learning, communicating and interaction is different because of the pervasiveness of technology within their personal culture. The creation of a new platform for student-teacher communications around technology is a noteworthy success outcome for Speak Up Day 2003.

We have many anecdotal stories from many schools and communities about how the Speak Up Day event opened up a new dialogue of communications about technology use between students and teachers.

"We had a chance to see technology through the eyes of the students. We are looking forward to the survey results and anticipating making valuable adjustments in the way technology is used at our school," shared a teacher from Jacksonville, North Carolina just after facilitating a group discussion with her elementary age students for Speak Up Day.

"Kids need to have a voice. We learned from the students that they are using instant messaging at home to help each other. Now I am investigating and researching through the web how we can impact learning using that strategy. We can't meet needs unless we hear from the students," noted a technology coach at a high school in Tennessee reflecting on Speak Up Day.

Speak Up Day provided the forum for those new discussions. As the national findings are further distributed, we anticipate that these new conversations will proliferate and will include parents, community leaders, district administration and school board members. Organizations, state agencies, corporations and school districts should share this report with their members, clients and constituents to promote more inclusion of students in education discussions.

We are encouraging schools and districts to reach out to hear their own students' voices on education and technology. We will maintain a rich repository of materials on our website to help others engage student voices. The Speak Up Day lesson plans and survey tools are still available and we urge educators to use those materials for their own local discussions with students or to run their own mini-surveys. We are also interested in having schools and organizations share with us their best practices for engaging student voices. Though our vast network of partners and affiliations with schools nationwide NetDay can effectively disseminate those tools to other educators.

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We are also very interested in supporting the students' own engagement efforts. We know from our findings that the students have good ideas and want to learn how to be more involved with decision-making that affects their education. Through our website (www.NetDay.org) we will be providing tools to help students create student technology advisory councils, make presentations to school boards and to advocate for greater business and parental involvement in technology fundraising efforts. Likewise, we are interested in collecting the "real stories" of how students are impacting change in their schools and communities around technology and provide a national dissemination channel so that other students can learn from these successes.

Goal #3: To drive a new national awareness about the importance of student voice in our national dialogues on education and technology.

NetDay did not invent the idea of asking students their ideas on technology. But Speak Up Day did expand the reach of some earlier efforts and, just as we did with the NetDay school wiring events, we have been able to bring national attention to the issue. Evidence of that new national awareness of the importance of student voice in discussions of education and technology can be found on the proposed agendas for many national education conferences. More and more conferences are setting up student panels to discuss a wide range of education issues and NetDay is providing consultative support to many of these efforts. The inclusion of student input into the new National Education Technology Plan is another example of the emerging importance of student voice in national discussions. NetDay is very proud to have played a leadership role in the development of this new national awareness through Speak Up Day 2003.

As organizations think about including student voices and student input into strategic planning discussions, program development, product creation or outreach efforts, NetDay would be happy to share experiences and expertise. Our Speak Up Day model is an effective tool for collecting and disseminating authentic feedback. In addition, as NetDay continues to refine the Speak Up Day tools, input from a wide range of different organizations working with youth will continue to be important. We encourage organizations to not only think about engaging students and including student voice components in programs and conferences but also to actively and generously share their findings and experiences with the greater community of advocates for student voice in education.

NetDay Speak Up Day for Students 2003 provided a forum for engaging student voices and views on technology and education. Speak Up Day offered us new information about students' own ideas on technology and education. It also initiated new conversations, both at the community level and in national policy circles, about how technology is used to impact learning in our schools. We raised a new awareness about the importance of student input into issues that impact their lives and their education. But our work is not done. NetDay continues to engage the voices of key stakeholders in education and, in concert with those voices, we are working to improve the quality of education for all students through the effective use of technology. Thank you for supporting these efforts.

**If we don't speak up about things that are important to us, who will?
10th grade student, Las Flores, California**

Acknowledgements

NetDay Speak Up Day for Students 2003 is also a success story about the power of partnerships. We are very pleased to recognize the individuals and organizations that worked with us to make it possible for 210,000 students to share their voices and views on technology.

Our Sponsors

The following organizations provided financial and in-kind support:

- BellSouth Foundation: Kim Mulkey, Director of Technology
- Google
- Sun Microsystems
- US Department of Education & National Education Technology Plan Outreach Team:
 - John Bailey, former Director of the Office of Education Technology
 - Susan Patrick, acting Director of the Office of Education Technology
 - Helen Soule, Senior Advisor, Office of Post-secondary Education
 - Doug Levin, Senior Research Analyst, American Institutes for Research

Our Non-profit Partners

The following nonprofit groups spread the word about Speak Up Day to schools all over the country through their newsletters, email lists, conferences and websites:

Alliance for Excellent Education, American Association of School Administrators, American Electronics Association, Benton Foundation, Cable in the Classroom, College Board, Consortium for School Networking, Council for Exceptional Children, ExplorNet, Florida Virtual High School, Generation YES, George Lucas Educational Foundation, Great Lafayette (LA) Chamber of Commerce, GreatSchools.net, High Tech High, International Society for Technology in Education, McKenzie Group, MAR*TEC, MOUSE, National Association for College Admissions Counseling, National Association of Elementary School Principals, National Council for Community and Education Partnerships, National Education Association, National Education Knowledge Industry Association, National Rural Education Association, National School Boards Association, North American Council for Online Learning, Points of Light Foundation, Project Tomorrow, Public Education Network, Software & Information Industry Association, State Education Technology Directors Association, TECH CORPS, TechNet, Technology Information Center for Administrative Leadership, The Children's Partnership, Think.com, US Conference of Mayors and Virtual High School.

Our Project Management and Support Team

This team insured that our vision for Speak Up Day became a reality:

- Nimble Press: Karen Greenwood
- Pointline Interactive: Judith Marciante
- IBT Software: Carl Paul
- Net Tango: Barbara Lang, James Schremp and Christopher Grill
- Kelly Connelly Design + Print: Kelly Connelly

In addition, we would like to thank all of the many students and teachers all around the country who helped us develop the survey tools and who also participated in our focus groups and panel discussions about student views on technology in education. Your enthusiasm and ideas were the catalyst for Speak Up Day 2003.

Appendices

A. About NetDay

B. National Data Summaries

Kindergarten – Grade 3 Group Surveys

Grades 3 – 6 Group Surveys

Grades 4 – 6 Individual Surveys

Grades 6 – 12 Group Surveys

Grades 7 –12 Individual Surveys

The national data summaries from the NetDay Speak Up Day for Students 2003 database are provided here for the common benefit of students, parents, educators, policy makers and community leaders who are interested in learning more about how students are using technology today in both their school and personal lives.

A. About NetDay

NetDay's mission is to connect every child to a brighter future by helping educators meet educational goals through the effective use of technology.

NetDay (www.NetDay.org), a national 501.c.3 non-profit organization known for its successful school wiring programs, today manages community and web-based programs that promote enhanced student achievement through the effective use of technology. Speak Up Day is NetDay's latest initiative and focuses awareness on the importance of student voices in the national dialogue on education and technology.

Our Board of Directors

NetDay is lead by a very active and dedicated Board of Directors that brings business, education and non-profit experiences to our leadership team. We are very proud to introduce our 2004 NetDay Board of Directors:

Alan Arkatov	CEO & President, Burson-Marsteller, Southern California
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Linda Roberts	Education Consultant, former Director of Education Technology, United States Department of Education

In addition, we are very proud of the continued involvement and support of our recently retired board members, **John Doerr**, partner, Kleiner Perkins Caufield & Byers; and Ira Fishman, partner, Patton, Boggs LLP, who both served admirably on our Board of Directors since 1998.

Our Speak Up Day Team

- Julie Evans, Chief Executive Officer
- Karen Greenwood, Speak Up Day Project Manager
- Judith Marciante, Web Guru
- Kathy Mathieu, Director of Finance
- Carl Paul, Web Developer and Database Administrator
- Irene Spero, Director of External Relations

Our Speak Up Day Sponsors

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